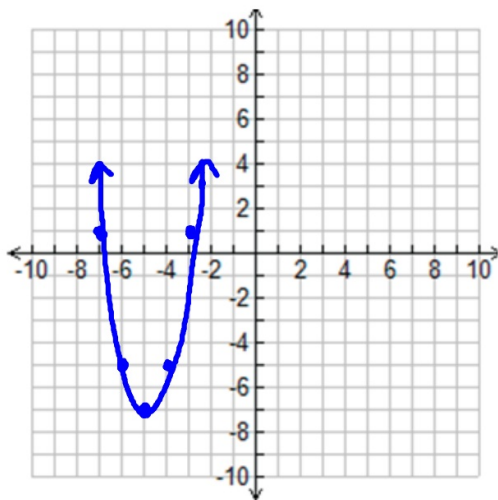


Bellwork 3/12/13:

Graph each of the following functions:

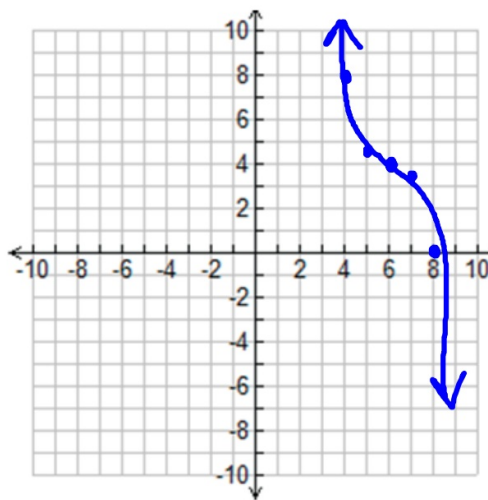
$(-5, -7)$

1) $y = 2(x+5)^2 - 7$



$(6, 4)$

2) $y = -1/2(x-6)^3 + 4$

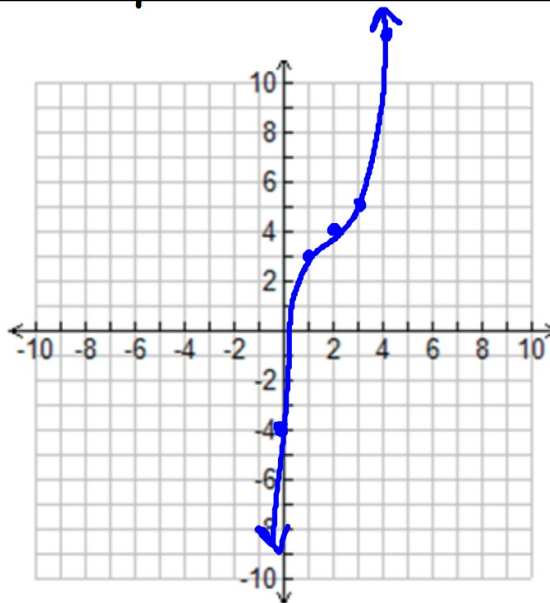


Section 5.9 - Finding the equation of Cubic Graphs

Remember:

$$y = a(x-h)^3 + k$$

Find the equation of each cubic function:



$$y = a(x-h)^3 + k$$

$$a = 1 \quad (h, k)$$

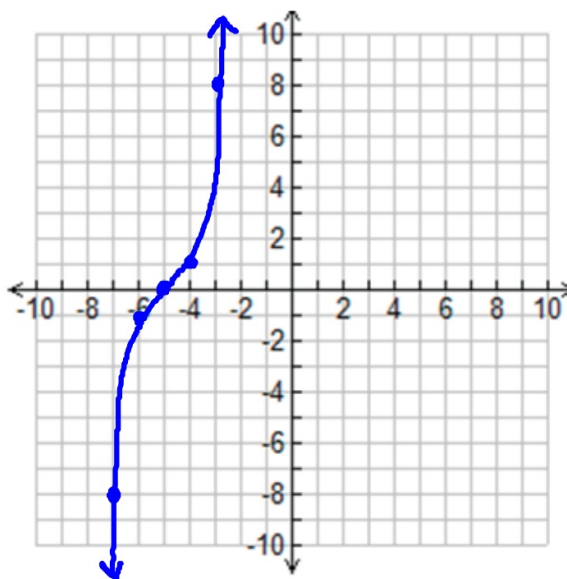
$$(2, 4)$$

$$y = 1(x-2)^3 + 4$$

$$y = (x-2)^3 + 4$$

Page 3

example 2:



$$a = 1 \quad (h, k)$$

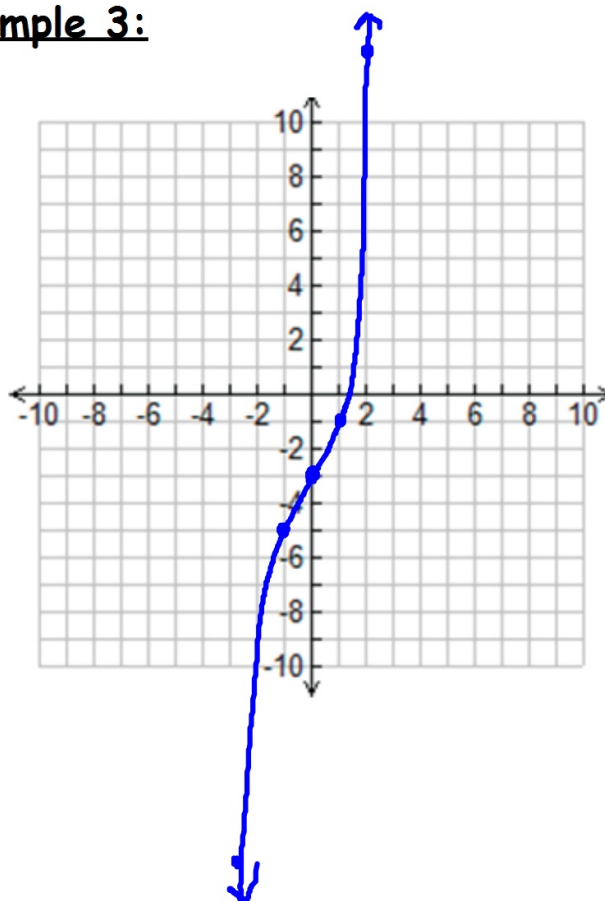
$$(-5, 0)$$

$$y = 1(x+5)^3 + 0$$

$$y = (x+5)^3$$

Page 4

example 3:

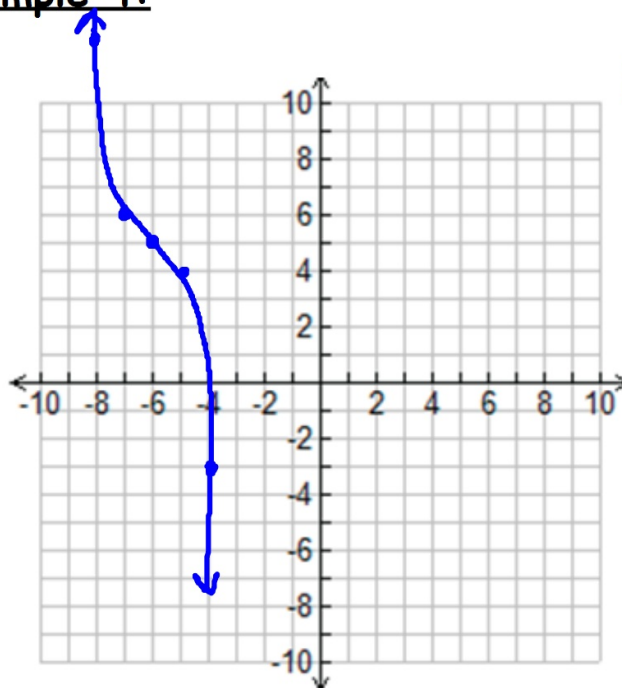


$$a=2 \quad h,k (0,-3)$$

$$y = 2(x-0)^3 - 3$$

$$y = 2x^3 - 3$$

example 4:

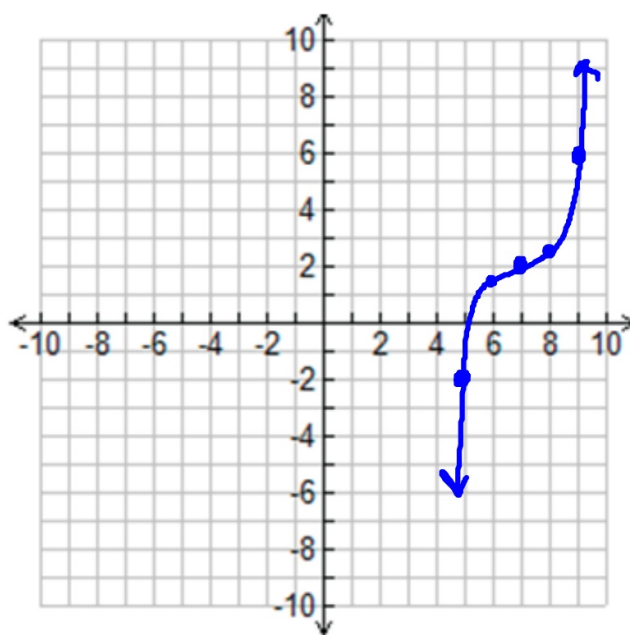


$$a=-1 \quad h,k (-6,5)$$

$$y = -1(x+6)^3 + 5$$

$$y = -(x+6)^3 + 5$$

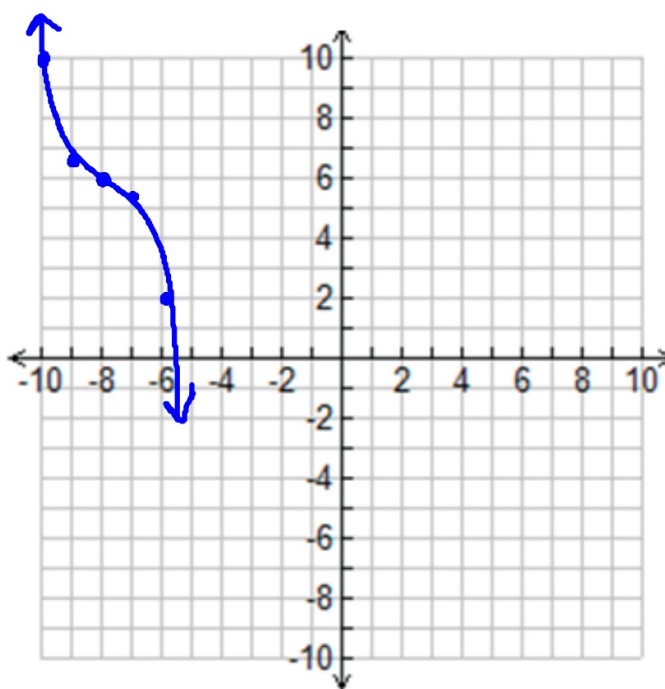
example 5:



$$a = \frac{1}{2} \quad h, k (7, 2)$$

$$y = \frac{1}{2}(x-7)^3 + 2$$

example 6:



$$a = -\frac{1}{2} \quad h, k (-8, 6)$$

$$y = -\frac{1}{2}(x+8)^3 + 6$$

Homework: Worksheet 5.9 #2

